

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/797,461	MERZOUGUI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mark Ruthkosky	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 3/10/2004.
2.  The allowed claim(s) is/are 1-11.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 3/10/2004
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

MARK RUTHKOSKY  
 PRIMARY EXAMINER  
*Mark Ruthkosky*  
 1-4-2007

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 3/10/2004 has been placed in the application file, and the information referred to therein has been considered as to the merits.

### ***Drawings***

The drawings filed on 3/10/2004 have been approved.

### ***Allowable Subject Matter***

Claims 1-11 are allowed. The following is an examiner's statement of reasons for allowance.

The prior art does not teach the invention as claimed. The most pertinent prior art has been presented. For example, the Ovshinsky (US 2003/0207156 and US 2003/0129459) references teach an integrated hybrid electrochemical device comprising a vehicle including a fuel cell and a battery (see the figures.) A first set of electrodes is in one housing which, in the charged state, comprises a NiOOH electrode, and a dissociable metal-hydride electrode. A second set of electrodes is within a second housing comprising a hydrogen gas-diffusion electrode and an oxygen/air gas-diffusion electrode. An alkali metal hydroxide electrolyte is used in each device (see paragraphs 103 and 204 of '156.) Separators are noted in the battery examples. An oxygen/air plenum confronting said oxygen/air gas-diffusion electrode for supplying air to said air oxygen/gas-diffusion electrode, and a hydrogen plenum confronting said

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hydrogen gas-diffusion electrode for supplying hydrogen to said hydrogen gas-diffusion electrode are noted in the fuel cell (claims 1-63 of '156 and claims 1-62 and paragraph 136 of '459.)

The prior art does not teach or fairly suggest a hybrid electrochemical device wherein both the fuel cell and battery electrodes are in the same housing and the electrolyte is common to both electrode pairs. In the prior art, the battery and the fuel cell are in separate housing and do not share a common electrolyte. Further, the references do not teach an arrangement wherein the oxygen/air plenum also confronts said nickel hydroxide electrode and supplies oxygen/air to said nickel hydroxide electrode, and said hydrogen plenum also confronts said metal-hydride electrode and supplies hydrogen to said metal hydride electrode.

The references do not teach a combination of a fuel cell and a battery wherein the electrodes of each are in the same path of the hydrogen gas flow and oxygen gas flow. As the prior art does not teach a combined fuel cell and battery in which the electrodes and/or electrolyte are shared within the same housing, the claims are allowed. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Examiner Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-

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6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free.)

Mark Ruthkosky

Primary Patent Examiner

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14-2007